



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,747	03/30/2001	Michael J. Sinclair	03797.00037	4737
28319 7590 06/21/2004 BANNER & WITCOFF LTD., ATTORNEYS FOR MICROSOFT 1001 G STREET, N.W. ELEVENTH STREET WASHINGTON, DC 20001-4597			EXAMINER PRETLOW, DEMETRIUS R	
			ART UNIT 2863	PAPER NUMBER
DATE MAILED: 06/21/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,747

Applicant(s)

SINCLAIR ET AL.

Examiner

Demetrius R. Pretlow

Art Unit

2863

pm

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10,12-14,16-20 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10,12-14,18,22,24-26 is/are allowed.
- 6) ☒ Claim(s) 16,17,19,20,23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 16, 17, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tareev (US 6,147,680) in view of Boie et al. (US 5,847,690). Tareev teaches a first capacitive node and a second capacitive node each commonly coupled to a first electronic circuit node and a third capacitive node and fourth capacitive node commonly coupled to a second circuit node. Note Figure 3 and Abstract. Tareev teaches first, second, third and fourth capacitive nodes being disposed so as to be adjacent and interdigitated, wherein the pointing member interacts with at least one of the first, second, third, and fourth capacitive nodes. Note column 3, lines 30-63, abstract and Figure 3. Tareev teaches a fifth capacitive node and a fourth capacitive node each commonly coupled to the first circuit node; and a seventh capacitive node and an eighth capacitive node commonly coupled to the second capacitive node. Note Figure 2.

Tareev teaches the first, second, third, fourth, fifth, sixth, seventh, and eighth capacitive nodes being disposed so as to be interdigitated. Tareev does not teach the shape of the capacitive nodes being substantially wedge shaped.

Boie et al. teach the capacitive nodes being substantially wedge shaped. Note Boie et al. Figure 3B.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Boie et al. because it would allow the technology to be included in the display applications. Note Boie et al. column 6, lines 29-31.

In reference to claim 17, Tareev teach the first, second, third and fourth capacitive nodes each comprise an etched conductive tracing on a substrate. Note Tareev column 2, lines 50-60 and Figure 3.

Claim 19, contains limitations similar to those in claim 16 which was discussed above. The wedge shaped capacitive nodes are equivalent to the triangular shaped capacitive nodes.

capacitive nodes.

In reference to claim 20, Tareev teach a first capacitive node and a second capacitive node each commonly coupled to a first electronic circuit node and a third capacitive node and fourth capacitive node commonly coupled to a second circuit node. Note Figure 3 and Abstract. Tareev teach first, second, third and fourth capacitive nodes being disposed so as to be adjacent and interdigitated, wherein the pointing member interacts with at least one of the first, second, third, and fourth capacitive nodes. Note column 3, lines 30-63, abstract and Figure 3. Tareev teach wherein the first, second, third and fourth capacitive nodes being extend in an axial direction and are interdigitated with each in the following order along a direction perpendicular to the axial

Art Unit: 2863

direction: first capacitive node, then third capacitive node, then second capacitive node, then fourth capacitive node. Note Tareev Figure 3. Tareev does not teach the shape of the capacitive nodes being substantially wedge shaped.

Boie et al. teach the capacitive nodes being substantially wedge shaped. Note

Boie et al. Figure 3B.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Boie et al. because it would allow the technology to be included in the display applications. Note Boie et al. column 6, lines 29-31.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tareev in view of Holehan. Tareev teach a first capacitive node and a second capacitive node each commonly coupled to a first electronic circuit node and a third capacitive node and fourth capacitive node commonly coupled to a second circuit node. Note Figure 3 and Abstract. Tareev teach first, second, third and fourth capacitive nodes being disposed so as to be interdigitated, wherein the pointing member interacts with at least one of the first, second, third, and fourth capacitive nodes. Note column 3, lines 30-63, abstract and Figure 3. Tareev teach an insulating material disposed over the first and second circuit nodes. Note Tareev column 2, lines 51-53 and Figure 1.

Tareev does not explicitly teach a groove formed in the insulating material and running axially in an axial direction, the first, second, third, and fourth capacitive nodes also extending in the axial direction, wherein the pointing member interacts with at least one of the first, second, third, and fourth capacitive nodes.

Holehan teach groove formed in the insulating material and running axially in an axial direction, the first, second, third, and fourth capacitive nodes also extending in the axial direction, wherein the pointing member interacts with at least one of the first, second, third, and fourth capacitive nodes. Note Figure 2.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Tareev to include the teaching of Holehan because it would provide a boundary for the placement of the pointing device.

Response to Arguments

Applicant's arguments with respect to claims 16,17,19,20,23 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues that Tareev does not teach a groove formed in the insulating material running axially in an axial direction and each capacitive node being wedge shaped. Applicant is directed to rejections above.

Allowable Subject Matter

3. Claims 1-10,12-14,18,22,24-26 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Demetrius R. Pretlow whose telephone number is (703) 272-2278. The examiner can normally be reached on 8-4:30.

Art Unit: 2863

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (703) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Demetrius R. Pretlow
Patent Examiner

Demetrius Pretlow 6/15/04

John Barlow
John Barlow
Supervisory Patent Examiner
Technology Center 2800